DOCUMENT RESUME

ED 259 175 CE 041 895

TITLE	Analysis of Michigan's Sex Equity Efforts in Vocational Education with Recommendations.
INSTITUTION	Western Michigan Univ., Kalamazoo. Center for Women's Services.
SPONS AGENCY	Michigan State Advisory Council for Vocational Education, Lansing.
PUB DATE	Jan 85
NOTE	27p.
PUB TYPE	Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Change Strategies; Comparative Analysis; *Educational Policy; Educational Practices; Enrollment; Enrollment Trends; *Equal Education; Financial Support; Needs Assessment; Nontraditional Occupations; Outcomes of Education; Policy Formation; Salary Wage Differentials; Secondary Education; *Sex Bias; *Sex Fairness; Sex Role; State Action; State Programs; State School District Relationship; *Statewide Planning; *Vocational Education
IDENTIFIERS	*Michigan

ABSTRACT

Examination of data concerning such topics as enrollment in nontraditional vocational programs and comparative earnings of male and female vocational graduates indicates that efforts to reduce sex bias and sex role stereotyping in Michigan's secondary vocational programs have resulted in increased attention to the issue at the local level. Such efforts, however, appear to have limited impact on the student population, their parents, or their peers. Increases in the percentage of students electing nontraditional vocational classes were erratic and were not necessarily characteristic of sites that had been funded to train staff, disseminate nonbiased resources, or pilot a specific activity. It was recommended that the State direct its economic and technical resources toward developing a comprehensive model for local school districts to recruit and retain students in nontraditional programs; that sex equity efforts of the Vocational Technical Education services be coordinated with those of the State Department of Education; that monitoring of program development efforts in this area be continued; and that the State establish a comprehensive data collection system to gather more detailed information on job placement, vocational graduate earnings, and perceptions of vocational graduates. (Appendixes to this report include comparisons of earning of male and female vocational graduates, excerpts from Federal and State legislation on sex equity in education, and information concerning progress on planning directions for sex equity in Michigan.) (MN)

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ED259175

ANALYSIS OF MICHIGAN'S SEX EQUITY EFFORTS IN VOCATIONAL EDUCATION WITH RECOMMENDATIONS

Michigan State Advisory Council
for Vocational Education

January 1985

CE041895

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ACKNOWLEDGMENTS

This report was prepared for the Michigan State Advisory Council for Vocational Education, by the Center for Women's Services, Western Michigan University, Allene W. Dietrich, director, with:

Karla Atkinson, Office of Sex Equity in Education,
Michigan Department of Education
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and

Marv Oberlander, Director of Vocational Education,
Mount Pleasant Schools
Elizabeth Giese, Evaluation Committee, SAC-VE

With acknowledgement to:

League of Women Voters of Michigan for A Study of the Status of Sex Equity in Michigan's Vocational Education Programs

and

Dr. Sara Ann Lincoln for A Summary Sex Equity Report of Michigan Programs, Activities and Expenditures Since 1977.

Analysis of Michigan's Sex Equity Efforts in Vocational Education With Recommendations

Introduction

The state of Michigan since 1976 has shown an ever increasing commitment to sex equity in vocational education. Because of this commitment the State Advisory Council for Vocational Education (SAC-VE) has authorized a comprehensive, updated study of the status of sex equity in Michigan vocational education programs.

Assessing the status of sex equity and the impact of efforts which the state educational agency has undertaken to eliminate sex bias and sex role stereotyping in vocational education at the local level is a task complicated by several factors. First, it is difficult to identify those items which clearly signal positive change. Second, it is also difficult to measure such change. Does one rely on what is perceived as positive change, for example? If not, where does the researcher look for less subjective indications at the local level that sex bias and sex role stereotyping have been reduced? Longitudinal studies at the state or local level, regardless of the items being measured and the way change is measured, are also muddied by variables which continually impact the educational agency and in turn influence the vocational program. Changes in funding levels, variations in the vocational curriculum, new developments in the labor market, and those individuals authorized as decision makers are variables that continually make for murky comparisons and contrasts in a local vocational program over the course of just a few years.

Nevertheless, assessing the impact of efforts to eliminate sex bias and sex role stereotyping in local vocational programs must be an element of SAC-VE's effort to determine and oversee policies to provide sex equity in Michigan's vocational education programs.

This paper will propose ways to assess and monitor Michigan Department of Education efforts to eliminate sex bias and maximize the effects of new resources available under the 1984 Federal Vocational Education Act.

This paper 1) explains the importance of sex equity vocational education, 2) gives the historical background leading to legislation requiring sex equity, 3) presents findings from a review of the state's efforts to reduce sex role stereotyping in vocational education, and 4) makes recommendations for the state to improve its sex equity program and effectively use new resources under the 1984 act.

Sex equity - a crucial issue today

Changes in the economic status of women and in the relationships between men and women today are considered by many authorities to represent the most crucial and influential trend in the U.S. Vocational education must respond to the challenge of societal changes and recognize that continuing the status quo of vocational education programs can be a disservice to students.

Vocational preparation at the secondary school level is a critical factor in defining future occupational and economic options for young women and men. At

present, due to segregation of classes, vocational education contributes to the limited earning power of women. For most women the need to work is economic. This is particularly true for unmarried women and women who are heads of households. Sixty-one percent of all women in the labor force maintain their own families. The proportion of poor families maintained by women increased substantially between 1971 (40%) and 1981 (47%), with greater proportions of minority populations affected. The feminization of poverty has become one of the most compelling facts of the decade. All other things being equal, if the proportion of the poor who are in female-headed families were to increase at the same rate as it did from 1967 to 1977, they would comprise 100% of the poverty population by the year 2000. Women, regardless of racial or ethnic identity, age, marital or maternal status, continue to enter the paid labor force at steadily increasing rates; yet their annual earnings are lower. In 1982, full-time women workers had average annual earnings of $8,063 less than men, with minority women earning even less. Appendix A offers a more detailed report of wage discrepancies between males and females.

Wage discrepancy is directly traceable to the secondary school vocational preparation of women and continues in the segregation of women in jobs which are lower paying, have few benefits, less job security and generally no on-the-job training opportunities. This segregation holds true regardless of racial or ethnic identity, age, marital or maternal status. Thus, economic realities demand that women train for jobs that assure economic self-sufficiency.

Reducing sex discrimination in vocation education is a crucial step in moving women to concentrate their vocational preparation in programs that have historically allowed for greater wage and advancement potential than those programs traditionally taken by females. SAC-VE's assessment of the current status of sex equity in Michigan's vocational programs reaffirms its commitment to monitor changes leading to such increased opportunities, especially for young women.

Historical Background for the 1975 Federal Vocational Education Mandate on Sex Equity

The primary role of vocational education has been to prepare people for occupations that require less than a baccalaureate degree through training programs and cooperative arrangements with business and industry. Thus, vocational education is closely associated with occupational choices and opportunities. Such choices are among the most critical that a person ever makes; they help to determine economic security, job mobility and life satisfaction.

Vocational education is one important route for both men and women to acquire the skills necessary for meeting the nation's goals of economic revitalization. This fact was recognized as early as 1917, when federal funds were first provided for vocational education under the Smith-Hughes Act. Subsequent federal laws have increased resources for vocational education, broadened and improved programs, funded support services and focused on the training needs of various segments of the population.

In recent years, however, it has become clear that sex bias and sex role stereotyping influence an individual's choice and restrict access to vocational education programs. Any factor which impedes educational opportunity for any individual in a democratic society runs counter to the ideals of that society.

Throughout the 1960s and 1970s, federal laws prohibited sex discrimination. Legislators, both federal and state, recognized that anti-discrimination measures were necessary in order to eliminate institutionalized stereotyping and discrimination in education and the workplace. A review of federal and state legislation is in Appendix B.

Passage of the 1976 vocational education amendments was hailed as a major step in reducing the traditional occupational segregation of the sexes. The 1976 amendments marked the recognition by the Congress of the link between job segregation and the type of education and employment training women and men receive. For the first time, states were required to develop and carry out a number of affirmative policies and procedures to overcome sex discrimination and sex stereotyping in federally funded vocational education programs. The act made federal funds available to finance activities designed to achieve sex equity in vocational education.

A Summary of Michigan's Sex Equity Program in Vocational Education

There are three sources of information which are currently available to assess the status of sex equity in Michigan's vocational programs: a) directions which VTES has taken to support local efforts to reduce sex bias and sex role stereotyping in vocational education, b) changes in the percentages of non-traditional students entering vocational education programs at both the state and local levels, and c) past and current perceptions of the status of sex equity from respondents in the field. Findings from a review of information from these three sources are summarized below.

A) State directions

With the 1976 federal mandate for sex equity in vocational education, the State of Michigan began a two-year research, training and materials development program.

The Center for Women's Services at Western Michigan University was funded for two years, 1977-79, to study the extent of sex bias in Michigan vocational education programs, develop curriculum materials and train educators. The project's recommendations in 1979 provide a starting place to assess progress. The chart in Appendix C summarizes the expanding vocational options (EVO) recommendations and progress thus far.

The recommendations for directions which VTES could take in the future were comprehensive and addressed several aspects of program development in sex equity. VTES chose to concentrate on funding local school districts to conduct staff workshops on sex bias, pilot activities, promote the use of nonbiased resources and review vocational and career materials for sex bias. These directions were supported each year in the Annual and Long Range Plan for Vocational Education in Michigan. As the chart in Appendix C indicates, EVO recommendations to establish a process for long range planning and compliance reporting, to develop a method to maintain records and to secure follow-up placement data, to intervene with targeted populations outside the school system and to pilot and evaluate a recruitment model have not been emphasized to date.

A summary of the state's efforts to achieve sex equity is presented in Table I.

TABLE I

Sex Equity Efforts in Michigan
1977 - 1983

	1977 - 1978	1978 - 1979	1979 - 1980	1980 - 1981	1981 - 1982	1982 - 1983
Incentive funding	-0-	-0-	$177,273	$138,628	$214,810	$241,597
Technical Assistance	$ 84,725 Western Mich. U.	$ 74,952 WMU	$119,447 Wayne Co. ISD	$ 93,000 WCISD	$ 97,000 WCISD	$142,194 WCISD
Funding for sex equity materials and Michigan Vocational Education Resources Center	-0-	-0-	$226,000[a]	$265,715[a]	$ 69,386	$ 10,000
Funded agencies (with districts served)	-0-	-0-	13 (36)	38 (56)	45 (101)	44 (86)
Products for field use	Training materials	2 curriculum models. 3 research reports. Bibliography of bias-free aids. Slide tape for recruitment. Road map to Change. Parent guide.	Sex equity programs. 12 recruitment models. Visual arts contest products.	ECO newsletter. ECO training materials. Participant guide and classroom activity booklet. Contact persons for lighthouse recruitment models, a source list.	ECO newsletter. ASETS training. ECO training guide for counselors. User guides for sex equity materials. Summary: Michigan activities to help students expand career options.	Network newsletter. 8 Implementation guides ASETS Training Guide. Materials usage workshop, leaders guide. Nontraditional role model bank. Expanding Career Opportunities, annotated bibliography. Five half-hour recruitment video tapes.
Participation[b]	State wide training for 18 educators. 3 regional training sessions for 60 educators.	Training seminar for selected local education agencies, 3 days 47 people, representing 14 sites.	Awareness training for 4,439 students, 3,422 staff, 244 community members. Sessions in 107 classrooms.	Training for 3,845 staff, 55 students and 11 others.	3 regional trainings. 15 two-day trainings. 1,579 educators and 75 students trained	Training for staff in six regions and 60 sites. 750 students and staff trained.

[a]the higher expenditures in 79-80 and 80-81 provided for all districts to buy bias-free materials and established the MVERC at MSU.
[b]Figures are not comparable as reporting was not uniform, but they suggest annual trends.

From A Summary Sex Equity Report on Michigan Programs, Activities and Expenditures Since 1977, Dr. Sara Ann Lincoln, 1984.

As Table I suggests, the state has continued to increase funds, materials and technical assistance available to the field. The number of agencies and local school districts participating in sex equity has also continued to grow since 1977.

Except for major grants to Wayne County Intermediate School District and Delta Schoolcraft ISD for technical assistance across the state and financial resources to launch the Michigan Vocational Education Resource Center, sex equity funds since 1979 have gone to local districts to pilot a recruitment activity, purchase training materials and/or hold staff inservices. Such grants have been limited to one year and in some cases showed little correlation between size, population served and amount of money awarded.

B) Enrollments

A current assessment must take into account not only the direction and the type of technical assistance which the state agency has provided to the field, but assess changes in enrollment patterns as well.

Thus, one way of measuring the impact of state efforts is to compare enrollment patterns, to identify changes which have lead to more balanced enrollments and to gather the perceptions of those in the field. To complete this assessment, the League of Women Voters, at the request of SAC-VE in October 1984, surveyed administrators, teachers, counselors, traditional vocational students, nontraditional vocational students and business/union leaders from 25 local sites in a sample representation of the state. The purpose of the survey was to compare the perceptions of vocational educators currently in the field with the perceptions gathered in a similar EVO study in 1978. Specifically, both surveys focused on gathering information on the perceived effectiveness of activities undertaken to reduce sex bias and sex role stereotyping in vocational education. Comparisons from these two studies, SAC-VE reasoned, should yield information to make judgements about changes in the status of sex equity in Michigan vocational education programs.

In addition, vocational enrollment patterns in the state and in these twenty-five sites were compared over the last three years, from 1981-1984, to identify what changes, if any, had occurred in the percentage of students entering nontraditional programs. As a concluding step in this assessment, the perceptions and observations of what had been done to reduce sex bias and stereotyping in vocational education in the sample of sites were compared to enrollment patterns in the sample, to make some preliminary judgements about the effectiveness of the activities in meeting the state's goal of more balanced enrollments in all secondary vocational programs.

State Enrollment

Table II presents an overview of enrollment patterns in Michigan over the last three years. As the data in Table II reveal, annual increases in the enrollment of nontraditional students are seen only in the Business/Office program.

TABLE II

Comparison of Enrollments of Males and Females
in Michigan Vocational Education Programs from 1981-1984

PROGRAM	Total number of students served in 1984	1981-82 Male	1981-82 Female	1982-83 Male	1982-83 Female	1983-84 Male	1983-84 Female
Consumer Homemaking (nonwage earning)	64,329	25%	75%	25%	75%	25%	75%
Trade and Industry[a]	42,345	86%	14%	85%	15%	85%	15%
Business/Office[b]	21,376	12%	88%	14%	86%	15%	85%
Marketing and Distribution	16,497	42%	58%	42%	58%	42%	58%
Home Economics Related Occupations (wage earning)[c]	10,523	34%	66%	35%	65%	35%	65%
Agriculture[d]	9,282	75%	25%	72%	28%	72%	28%
Health[e]	8,616	10%	90%	8%	92%	12%	88%

Notes: [a] The greatest number of females in this program area have remained clustered in cosmetology over the last three years.

[b] The greatest number of males in this program area have remained clustered in business data processing over the last three years.

[c] The greatest number of males in this program area have remained clustered in food management over the last three years.

[d] The greatest number of females in this program area have remained clustered in horticulture over the last three years.

[e] The greatest number of males in this program have remained concentrated in a health occupation cluster over the last three years.

Despite the appearance of a slow but steady increase in overall nontraditional enrollment in each program area, the sexes continue to cluster extensively in different courses or classes. A more exhaustive review of the programs by course offerings reveals that, regardless of the program area, males generally cluster in courses that lead to fields which have historically offered higher wages, greater economic stability and opportunity for advancement. For example, gains in the overall enrollment of males in the Business/Office program can be attributed in great part to the inclusion of high tech and computer-related courses into this curriculum. On the other hand, smaller, slower gains in the overall enrollment of females in the Trade and Industry program cannot be traced to females entering courses which lead to apprenticeship opportunities, for example. In fact, the number of females in cosmetology courses across the state has always exceeded the number of females who are enrolled in <u>all</u> other Trade and Industry classes over the last three years.

Enrollments in the Sample Sites

Table III below presents changes in the enrollment patterns of the twenty-five sites in the assessment sample.

TABLE III

Changes in the Enrollment Patterns of Males and Females in Michigan Vocational Education Programs from 1981 - 1984 in Survey Sites

N = 25 Sites

Program[a]	Total number of students grades 9-12 enrolled in 1983-1984	% of sites showing showing erratic or uninterrupted increases in the percentage of nontraditional students[b]	% of sites showing erratic or uninterrupted decreases in the percentage of nontraditional students[c]	% of sites showing no changes in the percentage of nontraditional students
Consumer Home Economics (nonwage earning)	64,329	19%	75%	6%
Trade and Industry	42,345	27%	55%	18%
Business/Office	21,376	44%	39%	17%
Marketing and Distribution	16,497	65%	35%	0%
Home Economics Related Occupations (wage earning)	10,523	18%	76%	6%
Agriculture	9,282	78%	22%	0%
Health	8,616	62%	38%	0%

Notes: [a] Programs are presented in this column by the size of enrollment in descending order.

[b] Erratic refers to patterns of enrollment of nontraditional students which have increased and decreased from year to year. Uninterrupted enrollment is a pattern which has occurred steadily without interruption for the last three years. Erratic increase refers to an inconsistent pattern of enrollment of nontraditional students but given the last two years, appears to suggest an increase in the percentage of nontraditional students.

[c] Erratic decrease refers to an inconsistent pattern of enrollment of nontraditional students but given the last two years, appears to suggest a decrease in the percentage of nontraditional enrollments.

Two conclusions are apparent from a review of the data in Table III. First, changes in enrollment patterns which lean toward more balance of the sexes in a program area are associated more often with programs serving smaller numbers of students. A second conclusion which can be confirmed from a review of the data in Table III is that in four of the seven vocational programs, a majority of sites sampled report decreases or no change over the last three years (Consumer Home Economics, Trade and Industry, HERO, Business/Office). A detailed break out of the sample sites, included as Appendix D, reveals some other findings regarding changes in enrollment patterns over the last three years.

A review of the figures in Appendix D demonstrates that 15 of 25 sites (60%) report an uninterrupted increase (I) in nontraditional enrollment in at least one vocational program area. Forty percent report only erratic (E E) increases and/or decreases (D) in nontraditional enrollment. Gains or losses in nontraditional enrollment do not appear to be linked to the size of the site (building, district or vocational center). Furthermore, more sites show erratic enrollment patterns than increases or decreases. Of 25 sites, 20 have some erratic enrollment patterns. Of these 20 sites, 6 sites consistently show fewer nontraditional students wherever erratic enrollment patterns occur.

Table IV below compares the uninterrupted increases of sites which have received sex equity funding from VTES with those uninterrupted increases reported by nonfunded sites in the survey sample.

TABLE IV

Comparisons of Uninterrupted Increases in the Enrollment of Nontraditional Students by Number of Programs and Sites from 1981 - 1984*

n = 25 Site

Type of site (number in sample)	N with increase in 1 program	N with increase in 2 programs	N with increase in 3 programs	N with increase in 4 programs	N with no uninterr. increases
Sites funded with VTES sex equity monies (10)	3	2	0	1	4
Sites not funded with VTES sex equity monies (15)	4	4	0	1	6

*Uninterrupted refers to a steady, constant increase in the percentage of nontraditional students from 1981-1984.

As Table IV points out, more than half of both the funded and nonfunded sites report uninterrupted increases in at least one program area. Uninterrupted increases are evident in 9 of 15 nonfunded sites (60%) and 6 of 10 funded sites

(60%). Thus, technical assistance and economic resources to date do not appear to have significantly contributed to balancing enrollments in vocational education. That is, the percentage of nonfunded sites reporting gains is identical to the percentage of funded sites who report similar progress in balancing enrollments.

C. Perceptions of Efforts to Address Sex Equity in Vocational Education in Michigan

An analysis of the data from A Study of the Status of Sex Equity in Michigan's Vocational Education Programs (October 1984), when compared to the survey results from 1978, reveals that some perceptions have remained consistent in the last six years. For example:

--The greatest influences on student choices in vocational programs lie outside the school system, resting most strongly with parents and peers.

--Staff attitudes, counseling services, information and materials contribute to an educational setting wherein equal educational opportunity in vocation education can be provided.

Most striking in a comparison of 1978 and 1984 survey data is an apparent increase in sex equity activities during this period. For example, respondents in the most recent study include:

--78% administrators and 61% teachers/counselors who are aware of sex equity activities

--49% administrators and 63% teachers/counselors who have been directly involved in planning these activities

--27% administrators and 69% teachers/counselors who have personally participated in these activities

--37% administrators and 53% teachers/counselors who report evaluating these activities

--46% administrators and 31% teachers/counselors who characterize sex equity activities as recruitment efforts

While the 1984 survey respondents did not precisely pinpoint the types of sex equity activities taking place at their site, administrators, teachers and counselors consistently associate sex equity activities in vocational education with three types of activities: 1) staff training, inservice, workshops; 2) increased review of dissemination of nonbiased information, materials and resources which concentrate on expanded opportunities for study in vocational education; and 3) recruitment activity with an individual or group counseling emphasis. Thus, the types of activities which were funded by VTES for local implementation appear to have been carried out, with major concentration on raising staff awareness and supplementing the vocational curriculum with nonbiased resource materials.

However, a comparison of the respondents by role group in the most recent survey also reveals some gaps in perception. Appendix E details some of these inconsistent impressions. Among these perceptual differences are:

--While administrators, teachers and counselors report recruiting efforts centering on individual or group counseling, very few students who were interviewed report they have ever received information or encouragement to consider a nontraditional class or nontraditional career.

--While teachers and counselors do not perceive classes are "closed" to students because of sex, almost 1 in 4 students surveyed perceive classes are closed.

--While administrators place high emphasis on information as a resource from the state which would be useful in achieving sex equity in vocational education, not one administrator reported that lack of information was the reason classes are now dominated by one sex.

--While administrators see support services for nontraditional students being delivered as counseling for individuals and groups, nontraditional students see support services in the form of job placement and co-op opportunities.

Conclusions

There are three sources of information which are currently available to assess the status of sex equity in Michigan's vocational programs: 1) directions which VTES has taken to support local efforts to reduce sex bias and sex role stereotyping in vocational education; 2) changes in the percentages of nontraditional students entering vocational education programs at both the state and local levels; and 3) past and current perceptions of the status of sex equity from respondents in the field. Assessed from a cumulative, three-year perspective, these sources of information suggest the following:

a) In the last five years, the state's efforts to address sex equity in vocational education have been directed toward saturating the field. Many small incentive grants have been awarded to several agencies to hold staff inservice programs; purchase, use and disseminate resource materials; and/or pilot a specific type of activity.

b) The respondents' perceptions of activities which have taken place in the field are identical to those established by the state. That is, they identify sex equity activities at the local level with staff development and expanded bases of nonbiased information and resource materials.

c) However, there remains a gap in the perceived sources of the problem of how to attract more nontraditional students and the direction of state and local efforts to date. That is, interventions directed at the workplace, to parents and to students themselves (reported to be the strongest influences) have been absent or minimal in state and local program plans.

d) Erratic enrollment patterns among nontraditional vocational students are common at both the state and local level. Where movement toward balanced enrollments is occurring, gains are reported in those vocational programs serving the smaller student populations.

e) An analysis of changes in enrollment patterns in sites which have received sex equity funding from VTES suggests that these sites have made no more nor any less progress toward balancing enrollments, compared to sites which have not received financial incentives.

Summary

It appears as if efforts to reduce sex bias and sex role stereotyping in Michigan's secondary vocational programs have resulted in increased attention to the issue at the local level. Activities appear to have increased since 1978 as a result of a state directed effort to saturate the field and to motivate local school districts through small incentive grants. Such efforts, however, appear to have had limited impact on the student population and on those others (peers and parents) who continue to be perceived as the strongest influence on students' career and vocational choices. Increases in the percentage of students who elect nontraditional vocational classes show up erratically and are not necessarily characteristic of sites which have been funded to train staff, disseminate nonbiased resources or pilot a specific activity.

Recommendations

This assessment concludes a three-step process which has been evolving since the 1976 amendments. The initial phase of research and product development ended in 1979 with a series of recommendations to guide the development of a statewide effort to eliminate sex bias and sex role stereotyping in Michigan secondary vocational education programs. The second has been carried out since 1980, with a major concentration in awareness training and materials distribution in local districts across the state. This paper represents the findings from a third phase, which evaluates the direction and impact of the state's efforts to date.

SAC-VE has revisited the recommendations made by the EVO research team in 1979, analyzed the efforts to adopt the recommendations, and measured the impact of the state's efforts through perceptual and enrollment data. Based on our conclusions, the following recommendations are offered to consolidate the components piloted since 1979. These recommendations can serve only as the framework to initiate a period of innovation in vocational education that will create a society where all children can choose careers based on ability and interest and free of outdated assumptions of history and prejudice.

Recommendation 1

Because we have no model which envisions what sex equity in a school district is like when both resources and commitment are brought to bear, SAC-VE recommends that the state redirect its technical and economic resources toward the development of a comprehensive model for local school districts to recruit and retain

students in nontraditional vocational programs. Larger incentive grants should be awarded for a three to five year period, to fewer sites, to develop a recruitment and retention model that minimally includes the following components:

Existing Components Which Have Been Tested

a) ASETS - Achieving Sex Equity Through Students
b) Staff Training
c) Michigan Vocational Education Resource Center
d) Nontraditional Role Model Bank
e) Expanding Career Opportunities awareness models
f) Public information

New Components To Be Developed

g) Support services and activities for nontraditional student programs
h) Effective liaison with parents
i) Junior high program to use prevocational classes for recruitment of nontraditional secondary students
j) Self-monitoring system with regular reporting and technical assistance from the state
k) Financial incentives/formulas for local agencies which increase the number of students completing a nontraditional vocational program

Recommendation 2

Because sex equity cannot be achieved without involvement and cooperation from the entire educational system, SAC-VE recommends that the sex equity efforts of Vocational Technical Education Services be coordinated with the overall Michigan Department of Education approach to achieving Title IX compliance and sex equity at the local level and that VTES resources be directed to support the efforts of the Office for Sex Equity in MDE.

Recommendation 3

The new State Council on Vocational Education should continue to encourage program development in sex equity and to monitor progress. SAC-VE recommends these four activities as a beginning:

a) Call for an annual report from VTES which takes into account the three sources of information used in this study to make similar comparisons.

b) Continue to disseminate this study and forthcoming progress reports from VTES to a wide audience including the local advisory councils, to raise awareness of the issues of sex equity in vocational education outside of school district populations.

c) Because this study does not deal with the structural and policy issues that may impede progress, SAC-VE recommends the new council create a subcommittee and charge it with the task of assessing the impact of current funding formulas, labor market demands on the curriculum and curriculum content on vocational enrollment patterns of males and females.

d) To stimulate greater innovation and to mobilize more of our leadership potential at the local level, the State Council on Vocational Education should encourage professional activities through professional organizations to address sex equity issues and develop strategies to achieve sex equity in vocational education.

Recommendation 4

SAC-VE recommends that the state establish a comprehensive data collection system to gather more detailed information by sex on job placement (including apprenticeships), vocational graduate earnings and perceptions of vocational education graduates.

In 1982 full-time women workers had average annual earnings of $8,063 less than men.

Women working full-time in 1982 had average annual earnings of $13,014, while men's earnings averaged $21,077. Women made 61.7¢ to every dollar made by men.

	Annual earnings		Women's earnings as
	Women	Men	percent of men's
1955	$ 2,719	$ 4,252	63.9%
1960	3,293	5,417	60.8%
1965	3,823	6,375	60.0%
1970	5,323	8,966	59.4%
1975	7,504	12,758	58.8%
1980	11,197	18,612	60.2%
1982	13,014	21,077	61.7%

Hispanic women had the lowest income of any racial-ethnic group in 1982. Their income was half of white males'. In 1982, the average annual earnings for men and women by race were:

		Percent of White Male's
White Males	$21,602	100.0%
Black Males	15,503	71.7%
Hispanic Males	15,382	71.2%
White Females	13,160	60.9%
Black Females	12,132	56.1%
Hispanic Females	11,112	51.4%

National Commission on Working Women, Women's Work: Undervalued, Unpaid, (Washington, D.C., G.P.O. 1984)

Historical Overview of Michig n Legislation

Additional facilitators of expanded vocational education options are current state and Federal laws which mandate change and regulatory structures and roles which monitor progress. A history of the Michigan legislation follows:

"In 1955, soon after the 1954 U.S. Supreme Court decision in Brown v. Board of Education of Topeka, the Michigan Legislature passed the Fair Employment Practice Act, which was amended in 1966, by Public Act 349, to prohibit discrimination in employment on the basis of sex. In that same year, the Legislature, through Public Act 127 of 1966, directed the Michigan Department of Education to conduct an annual social studies textbook survey giving special attention and consideration 'to the degree to which the textbook fairly includes recognition of the achievements and accomplishments of the ethnic and racial groups . . .' Although Act 127 does not specifically state that textbooks shall be examined on the basis of their fair inclusion of the achievements and accomplishments of women, a number of textbook reviewers who assisted with the annual social studies textbook review did review the books from this standpoint.

In September, 1971, and again in June, 1975, the Governor issued 'Executive Directives' establishing policy within state government in Michigan to provide equal opportunity in the state classified service on the basis of merit, efficiency and fitness, and without discrimination because of race, color, religion, sex or national origin.

In 1972, the Michigan Legislature passed a series of acts to further guarantee the rights of individuals in Michigan. Public Act 116 prohibits discrimination in obtaining public accommodations because of sex; Public Act 267 prohibits discrimination in employment because of sex. Further, the Michigan Legislature, in June of 1972, in adopting identical joint resolutions (SJR 'GG' and HJR 'LLL'), ratified the proposed Equal Rights Amendment to the Constitution of the United States which relates to equality of persons regardless of sex. Public Act 138 of 1972 amended the Michigan School Code to permit girls to participate in all noncontact interscholastic athletic activities and provided, further, that selection of competing teams can be solely based on athletic ability.

More recently, the Michigan Legislature in Public Act 353 of 1974 directed the Department of Education to 'develop guidelines for expanding the existing school curriculum to include materials on the culture of ethnic, religious, racial minority peoples and contributions of women, as defined by the department of education.' Guidelines shall include:

'(a) History and heritage of these ethnic, religious, racial minorities and contributions of women.

'(b) Living conditions, beliefs, and customs of these ethnic, religious, racial minorities and contributions of women.

'(c) Problems and prejudices encountered by these ethnic, religious, racial minorities and contributions of women.

'(d) Word meanings and usage as employed by these ethnic, religious, racial minorities and contributions of women.

'(e) Culturally related attitudes and behavior of these ethnic, religious, racial minorities and contributions of women."[56]

Overview of Federal Legislation

Federal legislative and Presidential Executive Orders began in 1963 and the most recent Vocational Education Amendments of 1976 continue the pattern of outlawing discrimination based on sex and race in education and employment. The 1978 Supreme Court Decision in the Bahke case affirmed the legality of Affirmative Action plans growing out of Title IX legislation, even though it dissallowed the quota system as a legal means of achieving equitable representation of minorities and women in employment and education. A summary of Federal legislation follows:

Equal Pay Act of 1963

The Equal Pay Act of 1963 was approved as an amendment to the Fair Labor Standards Act. This action was the result of efforts from womens' organizations, unions, and other interest groups. The Equal Pay Act prohibits sex discrimination in payment of wages, overtime, and fringe benefits, for equal work in jobs requiring similar skills and responsibility and performed under similar working conditions. This law applied to most workers in the public and private sectors. In addition, the law prohibits employers from reducing the wages of any employee in an effort to equalize pay rates between the sexes. It also prohibits labor unions from causing an employer to discriminate against an employee by violating the equal pay provision. (Steele, 1974).

The Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964 prohibits discrimination by race, color, or national origin in educational programs receiving Federal funds. This legislation covers students and others and is administered by the Office of Civil Rights, U.S. Department of Health, Education, and Welfare.

Title VII of the Civil Rights Act as amended by the Equal Employment Opportunity Act of 1972 forbids discrimination based on race, color, religion, national origin, or sex in all aspects of employment by employers of 15 or more workers, by public and private employment agencies, and by public and private educational institutions.

The Act specifically prohibits discrimination in hiring or firing; wages; fringe benefits; classifying, referring, assigning, or promoting employees; extending or assigning use of facilities; training, retraining, or apprenticeships; or any other terms, conditions, or privileges of employment. This includes work assignments; sick leave, vacation, and overtime; insurance and health benefits; retirement, and advertising jobs by sex. (Steele, 1974). Title VII is enforced by the Equal Employment Opportunity Commission (EEOC) with respect to non-Federal employees and has issued a booklet to aid employers entitled "Guidelines on Discrimination Because of Sex." (U.S. Department of Labor, 1977).

Executive Order 11246, as amended by Executive Order 11375, (effective October 14, 1968)

This order requires Federal contracts to include language by which contractors pledge not to discriminate against any employer or applicant for employment because of sex, race,

56. *Guidelines for Eliminating and Preventing Sex Discrimination.* Michigan Department of Education, April 1976.

color, religion, or national origin. The contractor must further pledge to take affirmative action to ensure non-discriminatory treatment. Such action must include employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation, and selection for training including apprenticeship. Some contracts of $10,000 or less are exempt by regulation. (U.S. Department of Labor, 1977, 977)

The Office of Federal Contract Compliance Programs (OFCCP) has issued guidelines to standardize the compliance review procedure and guidelines for contractors to use in developing and maintaining written affirmative action programs. These guidelines set out requirements for such matters as the utilization analysis of each job group at a facility, establishment of goals and timetables for correcting deficiencies in the utilization of women and minorities, internal and external dissemination of an equal employment policy, and management responsibility for implementing and monitoring the policy. (U.S. Department of Labor, 1977, 977)

One problem with these affirmative action plans is the determination of utilization of women and minorities. Determination is based on availability figures. Availability figures are very difficult to ascertain with any degree of accuracy but are mainly obtained through data on the numbers of women and minority persons being trained and educated in the specific occupational categories.

Education Amendments of 1972

Title IX prohibits discrimination on the basis of sex in educational programs or activities which receive Federal funds. This law applies to all public pre-schools, elementary and secondary schools, vocational education institutions, undergraduate, graduate, and professional institutions, as well as many private schools.

The Office for Civil Rights of the Department of Health, Education, and Welfare issued effectuating regulations as of July 21, 1975. These cover such matters as recruitment and admission of students, financial and employment assistance to students, access to course offerings and athletic programs, and housing as well as employment policies. (U.S. Department of Labor, 1977, 977).

Title IX of the Education Amendments of 1972 has potential for eliminating sex bias in admissions, programs, and staffing patterns in public schools, vocational schools, and higher education. This act should help to eradicate sex-segregated classes and policies and practices which deny young women access to male-dominated vocational programs in secondary, post-secondary, and higher education institutions (Steele, 1974)

Vocational Education Amendments, 1976

The Vocational Education Amendments for 1976 require each state receiving Federal funds for vocational education to prepare detailed annual and long range plans (5 years) describing their entire program and the objectives to be obtained each year with respect to sex and racial/ethnic role stereotyping and bias and other specific areas of student variability and needs.

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Progress on planning directives for sex equity in Michigan

Planning directives	Progress
1. Development of a procedure to systematically monitor vocational education data.	
a. enrollment	Completed
b. job placement	Incomplete (a)
c. vocational graduate earnings	"
d. vocational graduate survey responses	"
e. apprenticeship placement program	"
f. program staffing	Completed
2. Development of a long-range planning needs assessment instrument and implementation of a compliance reporting system at the local level.	Incomplete (b)
3. Sponsorship and assistance in providing vocational education administration and faculty workshops on sex bias	Continuous
4. Sponsorship and assistance to research and develop projects designed to recruit more nontraditional vocational education students.	Incomplete
Pilots of model recruitment programs to encourage interest and participation of females and males in nontraditional vocational programs.	
5. Increased visibility of the resources, both human and non-human, which are available to local educational systems to address the issue of sex role stereotyping in vocational education.	Completed
6. Investigation of the nature of the pre-vocational opportunity to students at the junior high level.	Incomplete (c)
7. Development of, and assistance with, implementing a monitoring system of counseling and guidance programs.	
a. availability and accessibility of the counseling staff to female and male students.	Complete

(continued)

Planning directives		Progress
	(b) bias free career/guidance materials interest inventories, and appraisal instruments.	Completed
	(c) equal representation of males and females on the counseling and guidance staff	Incomplete
	(d) development of programs and information on course offerings, career choices, nontraditional work opportunities, etc.	Continuous (d)
8.	Discussion of alternative long-range plans to collaborate with populations outside the educational system to eliminate sex role stereotyping in vocational education.	Incomplete
9.	Creation of a state communications network to collect and disseminate current information on sex role stereotyping in vocational education.	Completed (e)
10.	Examination of local efforts to prepare secondary students for admission to apprenticeship programs.	Incomplete (f)
11.	Collection and analysis of the perceptions of key persons in selected audiences.	Completed
12.	Continual revision and updating of VTES state plan goals and objectives.	Completed
13.	Development of long-range plans to coordinate project activities with those undertaken by the Sex Equity Coordinator.	Completed

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a. Vocational education follow-up study is used but more details are needed. Improve the follow-up of data on placement and earnings to study impact of sexual stereotyping in vocational education classes.

b. There are no such instruments in place. There is a blueprint for action encouraging improvement of local education but vocational education gets little attention. In the blueprint for action, standards of performance and equity are components recommending vocational education concerns should be articulated as much as other sections of the local structure.

c. Due to limited funds and staff, junior high programs have not been emphasized.

d. Outwardly discriminatory practices have been eliminated.

e. The network is in place in MSU library.

f. SAC-VE has completed this recommendation.

Appendix D. (1)

Program Changes by Type of Site from 1981-1984 N=25 Sites

Site/Type	Agri-culture	Business Office	Marketing/	Health	Consumer HE	HERD	Trade/Industry (excludes cosmetology, radio-television, and law
Districts						D	S'
	E↑	I	E↓	E↓	E↑		S'
	E↓	E↓	E↑	E↑	D	E↑	E↓
		I	I	E↑	E↓	E↓	E↑
		I	I	D	D	I	I
		S'			E↓	E↓	E↓
	I	I	E↑	D	E↓	E↓	E↑
	E↓	E↓	E↑		E↓		
		E↑	E↑		E↓		E↓
		S'	E↑				
Buildings	I	E↓	E↓	E↓		E↓	I
		D				D	D
	E↑				E↑	E↓	
		E↓	E↑	E↑	S	S'	E↑
		E↓	I		E↓	E↓	E↓
		E↓	E↑		I	E↓	D
		S'	D	I	E↓		E↓
		S	E↑	I	D		D
		I	E↓				S'
		D	I	I	E↓	E↓	S'
		E↓	E↓		E↓		E↑
Voc. Tech. Centers	I	I	D			D	D
		I	I	I		I	D
	E↑	I	E↓	I		E↓	D
	I	E↑		E↓		E↓	E↓

Codes:

E↑ - indicates erratic enrollment, with increased nontraditional enrollment over the last two years.

E↓ - indicates erratic enrollment, with decreased nontraditional enrollment over the last two years.

I - steady, uninterrupted increase of nontraditional students.

D - steady, uninterrupted decrease of nontraditional students.

S - unchanged enrollment percentages.

S' - unchanged and totally sex segregated at 100% of only traditional students.

* site which has received sex equity funding from state vocational educational sources.

Inconsistent Impressions
(General)

On the one hand,	However . . .
Ads. and teacher/counselor report recruitment centering around counseling most frequently.	Very few students report they have ever received information or encouragement to consider a nontraditional class or nontraditional careers.
A great percentage of administrators report knowing at least one student who could not enter voc. ed. program because of sex.	Less than ½ of the teachers/counselors acknowledge/knew of these students, or at least report any problems.
Administrators tend to perceive sources of the problem lie in the work place.	Teachers/counselors tend to perceive the sources of the problem lie with peer groups' intimidation, influence, etc.
Administrators report some problems with placement of nontraditional students.	Less than 1/10 of teacher/counselors report placement problems.
Teachers/counselors do not see classes as being "closed."	Almost 1 in 4 students perceive classes are "closed."
Administrators place high emphasis on information as a resource from the state that would be helpful.	Not one administrator cited lack of information as the reason why some vocational classes are dominated by one sex.
Counselors also place high emphasis on information/ exposure as a valuable state resource.	Counselors report peer and parent pressures as the reason why classes are dominated by one sex -- not lack of information.
Administrators report (46%) that they have nontraditional teachers at their schools.	Only 22% of the nontraditional students had knowledge of of such role models.
Administrators see support services for nontraditional students in the form of individual and group counseling.	Nontraditional students see support services in the form of the job placement center or co-op opportunities.
Administrators and teacher/counselors consistently cite peer/ family as strong influences and cite information to students as major recruiting activity.	Suggested strategies to relieve future stereotyping do not include increasing parent participation; they favor continuing to pass along information (see pg. 29 in the report).

From "A study of the Status of Sex Equity in Michigan Vocational Educational Programs", League of Women's Voters, October 1984.

MICHIGAN STATE BOARD OF EDUCATION

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